

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A superconducting coil assembly for mounting to a portion of a rotor assembly of an electric rotating machine, the superconducting coil assembly, in operation, maintained at cryogenic temperatures and the portion of the rotor assembly, in operation, being maintained above cryogenic temperatures, the superconducting coil assembly comprising:

at least one superconducting winding wound about a longitudinal axis of the coil assembly, and having an inner radial surface defining a bore extending through the coil assembly, said at least one superconducting winding configured to be mounted to the portion of the rotor assembly, at least one superconducting winding being spaced from and in radial relation to the axis of the rotor assembly

and at least one support member extending across the bore and configured to be mechanically coupled to the portion of the rotor assembly and to opposing portions of the inner radial surface of the at least one superconducting winding.

2. (Original) The superconducting coil assembly of claim 1 wherein the at least one support member includes a broad planar surface in a plane substantially transverse to the at least one superconducting winding.

3. (Original) The superconducting coil assembly of claim 2 wherein the at least one support member is formed of a thermally insulative material.

4. (Original) The superconducting coil assembly of claim 3 wherein the thermally insulative material is a epoxy glass reinforced molding compound.

5. (Original) The superconducting coil assembly of claim 4 wherein the plurality of superconducting windings are non-circular in shape.

6. (Original) The superconducting coil assembly of claim 5 wherein the non-circular shape is a racetrack shape having a pair of opposing arcuate end sections and a pair of opposing substantially straight side sections, the at least one support member mechanically coupled to the pair of opposing substantially straight side sections of the at least one superconducting winding.

7. (Currently Amended) The superconducting coil assembly of claim [[4]] 1 wherein the at least one support member is formed of a thermally insulative material.

8. (Original) The superconducting coil assembly of claim 7 wherein the thermally insulative material is a epoxy glass reinforced molding compound.

9. (Currently Amended) The superconducting coil assembly of claim [[4]] 8 wherein the plurality of superconducting windings are non-circular in shape.

10. (Original) The superconducting coil assembly of claim 9 wherein the non-circular shape is a racetrack shape defining a pair of opposing arcuate end sections and a pair of opposing substantially straight side sections, the at least one support member mechanically coupled to the pair of opposing substantially straight side sections of the at least one superconducting winding.

11. (Original) The superconducting coil assembly of claim 2 wherein the portion of the rotor assembly has a concave surface and the at least one support member includes a rounded member sized and shaped to be received with the concave surface of the portion of the rotor assembly.

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12. to 28. (Cancelled)